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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/066,331	01/31/2002	Topi Kaaresoja	944-003.091-1	9822				
4955	7590	01/27/2005	<table border="1"> <tr> <td colspan="2">EXAMINER</td> </tr> <tr> <td colspan="2">PERSINO, RAYMOND B</td> </tr> </table>		EXAMINER		PERSINO, RAYMOND B	
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WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			<table border="1"> <tr> <td>ART UNIT</td> <td>PAPER NUMBER</td> </tr> <tr> <td>2682</td> <td></td> </tr> </table>		ART UNIT	PAPER NUMBER	2682	
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DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/066,331	<b>Applicant(s)</b> KAARESOJA ET AL.	
	<b>Examiner</b> Raymond B. Persino	<b>Art Unit</b> 2682	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 August 2004 and 24 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 8-11, 15 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by TSUKAMOTO (US 2001/0044328 A1).

Regarding claims 1, 8 and 9, TSUKAMOTO discloses an apparatus, comprising:

a) means (17 of figure 1) for producing a tactile sensation for a user of the apparatus in response to a control signal; and b) a control means (10/19 of figure 1), responsive to a tactile sensation pattern signal, for providing the control signal; wherein the tactile sensation suggests associations or meanings and conveys information to the user of the apparatus and exclusive of information indicating a call is waiting to be answered and also exclusive of information indicating the identity of a caller (see paragraphs 16-20).

Regarding claim 2, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses that the control means is responsive to an instructions signal for instructing how to interpret a tactile sensation

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pattern and means for providing the instructions on how to interpret a tactile sensation pattern (see paragraphs 16-20).

Regarding claim 3, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses means for creating a tactile sensation pattern and at least temporarily storing the tactile sensation (see paragraphs 16-20).

Regarding claim 4, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses that the means for creating a tactile sensation includes: a) means for composing and editing a tactile sensation; b) a data store for storing a plurality of tactile sensation patterns; and c) means for selecting a tactile sensation pattern from the data store (see paragraphs 16-20).

Regarding claim 5, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses that the means for creating a tactile sensation includes: a) means for downloading and editing a tactile sensation; b) a data store for storing a plurality of tactile sensation patterns; and c) means for selecting a tactile sensation pattern from the data store (see paragraphs 16-20).

Regarding claim 10, TSUKAMOTO further discloses a method for use by a wireless terminal, comprising: a) a step, responsive to a tactile sensation pattern, of providing a control signal; and b) a step, responsive to the control signal, of producing a tactile sensation sensible to a user of the mobile phone; wherein the tactile sensation

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suggests associations or meanings and so conveys information to the user of the apparatus and exclusive of information indicating a call is waiting to be answered and also exclusive of information indicating the identity of a caller (see paragraphs 16-20).

Regarding claim 11, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses that the tactile sensation is further responsive to instructions on how to interpret a tactile sensation pattern (see paragraphs 16-20).

Regarding claim 15, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses that the tactile sensation pattern signal communicates an associated meaning or communicates a logical meaning or communicates a rhythm or communicates an imitation of a vibratory force (see paragraphs 16-20).

Regarding claim 19, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses that the tactile sensation pattern signal communicates an associated or logical meaning (see paragraphs 16-20).

Regarding claim 20, see the rejection of the parent claim concerning the subject matter this claim depends from. TSUKAMOTO further discloses that the tactile sensation pattern communicates a rhythm or communicates an imitation of a vibratory force (see paragraphs 16-20).

3. Claims 1-5 and 8-20 are rejected under 35 U.S.C. 102(e) as being anticipated by EIDEN (US 2004/0067780 A1).

Regarding claims 1, 8 and 9, EIDEN discloses an apparatus, comprising: a) means for producing a tactile sensation for a user of the apparatus in response to a control signal; and b) a control means, responsive to a tactile sensation pattern signal, for providing the control signal; wherein the tactile sensation suggests associations or meanings and conveys information to the user of the apparatus and exclusive of information indicating a call is waiting to be answered and also exclusive of information indicating the identity of a caller (see paragraphs 76-79).

Regarding claim 2, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the control means is responsive to an instructions signal for instructing how to interpret a tactile sensation pattern and means for providing the instructions on how to interpret a tactile sensation pattern (see paragraphs 76-79).

Regarding claim 3, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses means for creating a tactile sensation pattern and at least temporarily storing the tactile sensation (see paragraphs 76-79).

Regarding claim 4, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the means for creating a tactile sensation includes: a) means for composing and editing a tactile sensation; b) a data store for storing a plurality of tactile sensation patterns; and c) means for selecting a tactile sensation pattern from the data store (see paragraphs 76-79).

Regarding claim 5, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the means for creating a tactile sensation includes: a) means for downloading and editing a tactile sensation; b) a data store for storing a plurality of tactile sensation patterns; and c) means for selecting a tactile sensation pattern from the data store (see paragraphs 76-79).

Regarding claim 5, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the means for producing a tactile sensation is selected from the group consisting of: an eccentric electric motor, an intermittent source of air flow, an electric signal, a razor-type linear vibrator, a solenoid, a piezoelectric material, means for shaking a component of the apparatus, means for sliding back and forth a component of the apparatus, means for opening and closing a flip of the apparatus, and means for moving a sliding component back and forth (see paragraphs 12-19).

Regarding claim 10, EIDEN further discloses a method for use by a wireless terminal, comprising: a) a step, responsive to a tactile sensation pattern, of providing a control signal; and b) a step, responsive to the control signal, of producing a tactile sensation sensible to a user of the mobile phone; wherein the tactile sensation suggests associations or meanings and so conveys information to the user of the apparatus and exclusive of information indicating a call is waiting to be answered and also exclusive of information indicating the identity of a caller (see paragraphs 76-79).

Regarding claim 11, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation is

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further responsive to instructions on how to interpret a tactile sensation pattern (see paragraphs 76-79).

Regarding claim 12, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern signal is communicated independent of a voice telephone call (see paragraphs 76-79).

Regarding claim 13, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern signal is communicated as at least part of a data message according to a short or multimedia message service (see paragraphs 76-79).

Regarding claim 14, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern signal is a tactile icon communicated an at least part of a short message according to a short or multimedia message service (see paragraphs 76-79).

Regarding claim 15, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern signal communicates an associated meaning or communicates a logical meaning or communicates a rhythm or communicates an imitation of a vibratory force (see paragraphs 76-79).

Regarding claim 16, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation



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pattern signal is communicated independent of a voice telephone call (see paragraphs 76-79).

Regarding claim 17, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern signal is communicated as at least part of a data message according to a short or multimedia message service (see paragraphs 76-79).

Regarding claim 18, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern signal is a tactile icon communicated an at least part of a short message according to a short or multimedia message service (see paragraphs 76-79).

Regarding claim 19, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern signal communicates an associated or logical meaning (see paragraphs 76-79).

Regarding claim 20, see the rejection of the parent claim concerning the subject matter this claim depends from. EIDEN further discloses that the tactile sensation pattern communicates a rhythm or communicates an imitation of a vibratory force (see paragraphs 76-79).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over TSUKAMOTO (US 2001/0044328 A1) in view of an examiner's official notice.

Regarding claim 6, see the rejection of the parent claim concerning the subject matter this claim depends from. However, the prior art cited in the rejection of the parent claim does not explicitly disclose that the means for producing a tactile sensation is selected from the group consisting of: an eccentric electric motor, an intermittent source of air flow, an electric signal, a razor-type linear vibrator, a solenoid, a piezoelectric material, means for shaking a component of the apparatus, means for sliding back and forth a component of the apparatus, means for opening and closing a flip of the apparatus, and means for moving a sliding component back and forth. Nevertheless the examiner takes official notice that it was well known at the time the invention was made for means for producing a tactile sensation to be one of: an eccentric electric motor, an intermittent source of air flow, an electric signal, a razor-type linear vibrator, a solenoid, a piezoelectric material, means for shaking a component of the apparatus, means for sliding back and forth a component of the apparatus, means for opening and closing a flip of the apparatus, and means for moving a sliding component back and forth. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for a means for producing a tactile sensation to be one of: an eccentric electric motor, an intermittent source of air flow, an electric signal, a razor-type linear vibrator, a solenoid, a piezoelectric material, means for shaking a component of the apparatus, means for sliding back and forth a

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component of the apparatus, means for opening and closing a flip of the apparatus, and means for moving a sliding component back and forth. In order for one to practice the prior art cited in the rejection of the parent claim one would need to obtain a prior art means for producing a tactile sensation. Thus one would choose one of the prior art means for producing a tactile sensation. The choice on a particular one would be a routine engineering decision predicated on cost availability and size.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over TSUKAMOTO (US 2001/0044328 A1) in view of WANDERLICH (US 6,028,531 A).

Regarding claim 7, see the rejection of the parent claim concerning the subject matter this claim depends from. However, the prior art cited in the rejection of the parent claim does not explicitly disclose that the means for producing a tactile sensation is electrically coupled to the control means but is physically attached to the user of the apparatus. WANDERLICH discloses that the means for producing a tactile sensation is electrically coupled to the control means but is physically attached to the user of the apparatus (see figures 1 or 5). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for the means for producing a tactile sensation to be electrically coupled to the control means but physically attached to the user of the apparatus. It is beneficial to physically attach to the user of the apparatus the means for producing a tactile sensation because the user would then better be able to feel the tactile sensations.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over EIDEN (US 2004/0067780 A1) in view of WANDERLICH (US 6,028,531 A).

Regarding claim 7, see the rejection of the parent claim concerning the subject matter this claim depends from. However, the prior art cited in the rejection of the parent claim does not explicitly disclose that the means for producing a tactile sensation is electrically coupled to the control means but is physically attached to the user of the apparatus. WANDERLICH discloses that the means for producing a tactile sensation is electrically coupled to the control means but is physically attached to the user of the apparatus (see figures 1 or 5). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made for the means for producing a tactile sensation to be electrically coupled to the control means but physically attached to the user of the apparatus. It is beneficial to physically attach to the user of the apparatus the means for producing a tactile sensation because the user would then better be able to feel the tactile sensations.

### ***Response to Arguments***

8. Applicant's arguments filed 8/5/2004 and 11/24/2004 have been fully considered but they are not persuasive to overcome the rejections based upon TSUKAMOTO. However, it is noted the amendments to claims 1 and 10 do overcome the prior rejections based upon HIRAI et al. In the arguments filed 11/24/2004, the applicant's argues that the amended claim includes the subject matter that the tactile sensation "suggests associations or meanings" and so conveys information directly to a user, i.e. does so directly as apposed to providing coded information as in TSUKAMOTO. However, the examiner would like to point out paragraph 20 of TSUKAMOTO in which

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TSUKAMOTO teaches that the tactile sensation, while in code, does have a direct meaning to the user since the user, due to his memory, knows the meaning of the tactile sensation.

***Conclusion***

9. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

VICENDESE (US 2004/0176037 A1)

SLEICHTER, III et al (US 6,744,370 B1)

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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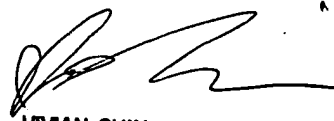
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond B. Persino whose telephone number is (703) 308-7528. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on (703) 308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond B. Persino *RP*  
Examiner  
Art Unit 2682

RP

  
VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600